

conclusions the Examiner draws from the prior art as the basis for rejecting every single claim 1-11. Additionally, Applicant is very concerned about the Examiner apparently rendering every single judgement against Applicant's claims in favor of negatively speculating against the allowability of claims 1-11 as opposed to positive speculation. The U.S. Patent Office and Patenting system was established under the U.S. Constitutional guidelines set forth in Article 1, Section 8 to issue patents whenever possible, not to "deny" the granting of patents whenever possible. The U.S. patenting system was established to issue patents (of course only when reasonably possible), and Applicant is greatly concerned about the Examiner rendering speculative negative opinions when he can be and should be rendering positive opinions pertaining to the allowability of Applicant's claims. Applicant respectfully requests that the Examiner please speculate in favor of allowability of Applicant's claims whenever speculative subjective judgement must be made, as this is more in keeping with the intent of the Founding Fathers when they wrote protections for inventors into the U.S. Constitution.

Applicant will present additional remarks favoring allowance after amendments presented below.

Applicant wishes to point out that the three applications of Applicant's listed in the Information Disclosure Statement originally submitted with the present application filing have all been approved for issuance. The applications are: 1) "GAME CONTROLLER WITH ANALOG PRESSURE SENSOR(S)" filed Oct. 1, 1997, serial number 08/942,450;

2) "VARIABLE-CONDUCTANCE SENSOR" filed June 29, 1998, serial number 09/106,825 now U.S. Patent 5,999,084; and

3) "VARIABLE-CONDUCTANCE SENSOR WITH ELASTOMERIC DOME-CAP" filed on July 24, 1998, serial number 09/122,269.

The inventions of my three above listed allowed or issued U.S. applications are related but not identical to the present claimed invention, and therefore I am very concerned about the

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issues of: 1) Double patenting between the present claims and those of my earlier disclosures, and 2) the conflicting nature of the First Office Action being of an "obviousness" rejecting of claims 1-11 of Applicant's present application relative to the clear indication of patentability thereof provided by my earlier allowed related application claims.

I will further address both the issues of Double patenting and the allowability of claims over the prior art after amending the claims so that the remarks may be directed toward the claims as amended. Thank you.

AMENDMENTS

Please amend the claims as follows wherein underlining indicates insertions and bracketing "[]" indicates deletions in the originally submitted claims. New claims are also added starting with the next highest unused number, such as new claim 12 for example. Below claims are present for examination and allowance.

1. (once amended) An improved hand-holdable remote controller structure for controlling a host device, said remote controller of the type including a housing, an electrical power source, electronic circuitry within said housing connected to said power source and including an emitter for emitting function-control signals from said housing, a plurality of finger depressible buttons exposed on said housing and interfacing with sensors electrically associated with said circuitry for allowing user selection of function-control signals emitted for controlling a host device; at least one of said sensors including a depressible dome-cap member and a pressure-sensitive variable-conductance analog material capable of providing at least three readable states of varied conductance, said states dependant upon depressive pressure applied to the variable-conductance analog material [sensor] through depression of at least one of said finger depressible buttons against the dome-cap member;

wherein the improvement comprises:

said circuitry including means for reading said at least three readable states of said variable-conductance analog material and for emitting distinct function-control signals for each of at least two states of said at least three readable states.

~~12~~ 12. An improved hand-holdable remote controller structure for controlling a host device according to claim 1 further including the dome-cap member comprising elastomeric material in dome shape positioned over said variable-conductance analog material.

~~13~~ 13. An improved hand-holdable remote controller structure for controlling a host device according to claim 1 wherein said host device is a video playback device and said distinct function-control signals for each of at least two states are video speed function-control signals, whereby video speed can be varied in rate by varied pressure applied to said variable-conductance analog material.

~~14~~ 14. An improved hand-holdable remote controller structure for controlling a host device according to claim ~~13~~ wherein the video playback device is a digital video disk player, the playback rate of which is controllable by said remote controller structure.

~~15~~ 15. An improved hand-holdable remote controller structure for controlling a host device according to claim 1 wherein said change rate function-control signals are signals for available channel scrolling.

~~16~~ 16. An improved hand-holdable remote controller structure for controlling a host device according to claim 1 further including the variable-conductance analog material capable of

providing at least nine readable states of varied conductance, said states dependant upon pressure applied to the variable-conductance analog material, and further wherein said circuitry includes means for reading said at least nine readable states of said variable-conductance analog material.

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17. An improved hand-holdable remote controller structure for controlling a host device according to claim ~~16~~⁷ further including said dome-cap member comprising elastomeric material positioned over said variable-conductance analog material, and further wherein said distinct function-control signals comprise video speed function-control signals for controlling the playback rate of a video playback host device.

~~4~~
18. An improved hand-holdable remote controller structure for controlling a host device according to claim 1 further including the dome-cap member comprising elastomeric material in dome shape and carrying said variable-conductance analog material positioned above proximal conductive elements.

~~9~~
19. An improved hand-holdable remote controller structure for controlling a host device according to claim 1 further including the dome-cap member comprising electrically conductive material over said variable-conductance analog material.

~~10~~
20. An improved hand-holdable remote controlled structure for controlling a host device according to claim ~~19~~² further including the electrically conductive material of the dome-cap member being metal, and the dome-cap member providing a portion of an electrical circuit through said variable-conductance analog material, and the dome-cap member is further structured to provide a user discernable tactile feedback upon depression of the dome-cap.

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13 2. (once amended) An improved hand-holdable remote controller for controlling a host device, said remote controller of the type including a housing, an electrical power source within said housing, electronic circuitry within said housing connected to said power source and including [an emitter positioned to emit] means for outputting function-control signals from said housing, a plurality of finger depressible buttons exposed on said housing and interfacing with sensors electrically associated with said circuitry for allowing user selection of function-control signals [emitted] output for controlling a host device; a plurality of said sensors read by said circuitry as sensors having only two readable states;

wherein the improvements comprise:

at least one of said sensors structured as a pressure-sensitive variable-conductance analog sensor to provide at least three readable states of varied conductance, said states dependant upon depressive pressure applied to the variable-conductance analog sensor;

said circuitry including means for reading said at least three readable states and for [emitting] outputting distinct function-control signals for each of at least two states of said at least three readable states.

13 21. An improved hand-holdable remote controller for controlling a host device according to claim *2* further including a dome-cap member in dome shape positioned over pressure-sensitive variable-conductance material of the variable-conductance analog sensor.

14 22. An improved hand-holdable remote controller for controlling a host device according to claim *21* wherein said host device is a video playback device and said distinct function-control signals for each of at least two states are video speed function-control signals, whereby video speed can be varied in rate by varied pressure applied to said variable-conductance analog sensor.

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~~15~~²². An improved hand-holdable remote controller for controlling a host device according to claim ~~22~~¹⁴ wherein the video playback device is a digital video disk player controlled by said remote controller.

~~12~~²⁴. An improved hand-holdable remote controller for controlling a host device according to claim ~~2~~¹¹ wherein said host device includes a tuner for channel changing and said distinct function-control signals for each of at least two states are available channel change rate function-control signals, whereby the available channels selectable by the tuner can be scrolled at varied rates determined by varied pressure applied to said variable-conductance analog sensor through depression of said button.

~~16~~²⁵. An improved hand-holdable remote controller for controlling a host device according to claim ~~2~~¹¹ further including the variable-conductance analog sensor structurally arranged of providing at least nine readable states, said states dependant upon pressure applied to the variable-conductance analog sensor, and further wherein said circuitry includes means for reading said at least nine readable states.

~~17~~²⁶. An improved hand-holdable remote controller for controlling a host device according to claim ~~25~~¹⁶ further including a dome-cap member comprising elastomeric material positioned over pressure-sensitive variable-conductance material of the variable-conductance analog sensor, and further wherein said distinct function-control signals comprise video speed function-control signals for controlling the playback rate of a video playback host device.

~~18~~²⁷. An improved hand-holdable remote controller for controlling a host device according to claim ~~26~~¹⁷ further including the dome-cap member structured to provide a user discernable tactile feedback upon depression of the dome-cap.

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ab (once amended) An improved hand-holdable remote controller for controlling a host device, said remote controller of the type including a housing, an electrical power source within said housing, electronic circuitry within said housing connected to said power source and including an emitter positioned to emit function-control signals from said housing, a plurality of finger depressible buttons exposed on said housing and interfacing with sensors electrically associated with said circuitry for allowing user selection of function-control signals emitted for controlling a host device;

wherein the improvements comprise:

at least two of said sensors each structured to include pressure-sensitive variable-conductance analog material to provide at least three readable states of varied conductance from each sensor of said at least two of said sensors, said states dependant upon depressive pressure applied individually to the sensors of said at least two of said sensors;

said circuitry including means for reading said at least three readable states and for emitting function-control signals representative of each of at least two states of said at least three readable states;

a first sensor of said at least two of said sensors, said first sensor associated with a first button of said finger depressible buttons, said first button variably depressible to allow applying varied depressive pressure to said first sensor, said first sensor associated with means of said circuitry for reading said at least three readable states and emitting tuner channel-up selecting type of said function-control signals;

a second sensor of said at least two of said sensors, said second sensor associated with a second button of said finger depressible buttons, said second button variably depressible to allow applying varied depressive pressure to said second sensor, said second sensor associated with means of said circuitry for reading said at least three readable states and emitting tuner channel-down selecting type of said function-control signals.

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~~20A.~~ (once amended) An improved hand-holdable remote controller in accordance with claim ~~19~~ wherein the first and second sensors [are each elastomeric] each include a depressible dome-cap [sensors each including a pressure-sensitive variably-conductive material positioned] over proximal conductive circuit elements of said circuitry and further with the pressure-sensitive variable-conductance analog material positioned between the dome-cap and the proximal conductive circuit elements.



~~21B.~~ (once amended) An improved hand-holdable remote controller for controlling a host device, said remote controller of the type including a housing, an electrical power source within said housing, electronic circuitry within said housing connected to said power source and including an emitter positioned to emit function-control signals outward as radiation from said housing, a plurality of finger depressible buttons exposed on said housing and interfacing with sensors electrically associated with said circuitry for allowing user selection of function-control signals emitted for controlling a host device; a plurality of said sensors read by said circuitry as sensors having only two readable states;

wherein the improvements comprise:

at least one of said sensors structured as a pressure-sensitive variable-conductance analog sensor for varying conductance through at least three readable states, said states dependant upon depressive pressure applied to an associated finger depressible button; and

said circuitry structured for reading any one state of said at least three readable states, and for emitting by said emitter a first signal type and

a second signal type, emission of either one of the signal types determined by an amount of time of depression of said button, and said second signal type further including a signal representative of a depressive level of depressive pressure applied to said button.



 6. (once amended) An improved method of controlling a host device using a hand-held remote controller, the controller of the type including a housing, an electrical power source ~~within said housing~~, electronic circuitry within said housing connected to said power source and including a radiation emitter positioned to emit radiation from said housing, a plurality of finger depressible buttons exposed on said housing and interfacing with sensors electrically associated with said circuitry for allowing user selection of function-control signals emitted as radiation by said radiation emitter for controlling a host device; at least some of said sensors being read by said circuitry as only ON/Off sensors[, said controller further of the type] wherein a user depresses any one of said buttons associated with the read as only ON/OFF sensors to activate a related singular function-control signal, and releases the button to deactivate said singular function-control signal; at least some of the sensors are analog capable containing pressure-sensitive variable-conductance material capable of outputting at least three readable values dependant upon applied pressure;

wherein the improvement comprises:

depressing, by the user, one of said buttons associated with an analog capable sensor with [any] a first level of user selectable pressure [level] of a plurality of user selectable pressure levels, said depressing of said button for activating [one] a first change rate function-control signal of a plurality of activatable change rate function-control signals associated with said button, and then,

depressing, by the user, said one of said buttons with a second level of user selectable pressure different than said first level of pressure for activating a second change rate function-control signal associated with said button, whereby the user selects and activates change rate function-control signals associated with said button by way of selecting the pressure applied to said button.

²⁶28. An improved method of controlling a host device using a hand-held remote controller according to claim ²⁷6 further including

depressing, by the user, said one of said buttons with a third level of user selectable pressure different than said first and said second levels of pressure for activating a third change rate function-control signal associated with said button.

²⁷7. (once amended) An improved method of controlling a host device according to claim [6] ²⁶28 wherein said host device is a device which plays recorded video wherein the rate of playback of the video is user determinable through [tuner for channel changing, and the method further comprises manipulating channel change rate by selecting any said user selectable pressure level of said plurality of] user selectable pressure levels associated with said button.

²⁸8. (once amended) An improved method of controlling a host device according to claim ²⁷7 wherein [manipulating] selection of [channel change] playback rate is such that [channel change] said playback rate is made to increase [increases] with increasing pressure applied to said button.

²³9. (once amended) An improved method of controlling a host device according to claim ²²8 wherein said host device is a recorded video player, and the method [further] ~~more narrowly~~ ^{further} comprises

[manipulating] changing video play rate by depressing said button and selecting [any] a said user selectable pressure level of said plurality of user selectable pressure levels associated with said button.

²⁴10. (once amended) An improved method of controlling a host device according to claim ²³9 wherein said host device is a recorded audio player, and the method [further] ~~more narrowly~~ ^{further}

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comprises

[manipulating] changing audio play by depressing said button and selecting any said user selectable pressure level of said plurality of user selectable pressure levels associated with said button.

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~~29~~. An improved method of controlling a host device using a hand-held remote controller according to claim ²²6 further including channel changing of a tuner by depressing said one of said buttons with a user selected level of user selectable pressure for selecting a channel change rate of the tuner.

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~~31~~. (once amended) A method of manufacturing an improved hand-held remote controller including the known prior art steps of: molding a housing; installing means for receiving a power source within said housing; installing electronic circuitry within said housing and connected to said means for receiving said power source; [connecting a radiation emitter to said circuitry and positioned to emit radiation from said housing;] installing a plurality of finger depressible buttons with sensors electrically associated with said circuitry; said circuitry for reading a plurality of said sensors as sensors having only two readable values; and

further including the novel combined steps of:

installing a flexible dome-cap member as a component of at least one of said sensors;

installing pressure-sensitive variable-conductance [sensors] material under said flexible dome-cap member, said material positioned to be activated by depression of [said] one of the depressible buttons, said variable-conductance material [sensors structured] structurally arranged to provide at least three readable analog values, said values dependant upon depressive pressure applied to said one of the depressible buttons;

installing circuitry for reading an immediate value of said at least three readable analog values of the pressure-sensitive